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10/033,875	12/19/2001	Ralf Dorwarth	304-773	1285

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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT PAPER NUMBER

2859

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/033,875

Applicant(s)

DORWARTH ET AL.

Examiner

Gail Verbitsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-8, 10-15, 18 and 20-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-8, 10-15, 18 and 20-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119 (a)-(d).

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the visible connection (visual contact) must be shown or the feature(s) canceled from the claim(s) 2-8, 10-15, 18, 20-60. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 2-8, 10-15, 18, 20-60 are finally rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable

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one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In this case, visible connection (visual contact) has not been clearly described in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-8, 10-15, 18, 20-60 are finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4, 6, 11, 13, 14, 20, 58 are finally objected to because of the following informalities:

In this case, "in a visible connection with the device" makes the claim language confusing because it is not clear what applicant means. Does applicant mean that the device is in physical connection and thus, visible to the operator? Or, perhaps, applicant means that the surface of the hotplate is transparent (visible) to an infrared rays (heat) so as the rays can be transmitted through? Furthermore, please note, that in the rejection on the merits, the Examiner considers that the surface of the hotplate is transparent "visible" to infrared rays. Appropriate correction is required.

Claims 2-3, 5-8, 10, 12, 15, 18, 21-24, 27-57, 59-60 are rejected by virtue of their dependency on claims 4, 6, 11, 13, 14, 20, 58.

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*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 6, 14, 20-24, 27-29, 50-51, 54, 57 are finally rejected under 35 U.S.C. 102(b) as being anticipated by Kobrich (U.S. 6118107).

Kobrich discloses in Figs. 1-3 a device for determining the temperature of a hot plate/ cookplate and thus, a cooking vessel 15, the cooking vessel having an underside and being placeable on the hotplate/ cookplate of a cooking appliance, wherein the cooking vessel is placed on at least one heating/ cooking zone 2. The device further comprises a heat element 13, at least one flat measuring element (reflector) 9 having a top surface for contact with underside of the cooking vessel, said flat measuring element formed by a separate and thin metal (material portion) attached/ fixed/ placed in the center of the top surface of the hotplate so as it projects above the surface. The device also comprises a device 5-12 for determining temperature sensed (reflected) by the measuring element 9. The measuring element is separate from the device 5-12 for determining temperature of the measuring element 9. The underside of the measuring element 9 is in communication with the device 5-12 for determining temperature of the measuring element 9 from below through the hotplate. It will, inherently, operate in the temperature range appropriate for known cooking appliances including 250-300 degrees C. It is also inherent, the

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measuring element of metal has a good heat conduction (low heat capacity). Since the final result is the amount a heat/ temperature, and thus, infrared radiation measured, it is considered that the device for determining the temperature of said measuring element is an infrared radiation sensor.

With respect to claims 20-22: the method steps will be met during the normal operation of the device stated above.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-4, 5, 7-8, 10, 15, 18, 52-53 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Kobrich (U.S. 6118107) in view of Feldman (U.S. 6072165).

Kobrich discloses the device as stated above in paragraph 8.

Kobrich does not explicitly state that the measuring element 9 is a material coating applied in a self-adhesive manner, printed color coating, metal foil, that the material is bonded, as stated in claims 2-4, 5, 7-8, 10, 15, 18, 52-53. Kobrich does not explicitly teach the particular height/ size of projection of the measuring element above the surface, as stated in claim 10.

Feldman discloses in Fig. 2 a device in the filed of applicant's endeavor comprising a flat temperature measuring element 118, 120 being in contact with a surface of a cooking vessel

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and being a silver/ color thin film/ metal foil/ metal oxide film (material coating). The measuring element can be printed on (applied in a self-adhesive manner/ bonded). The measuring element is in a contact with the cooking vessel. It is also inherent, the measuring element of metal or metal oxide has a good heat conduction (low heat capacity).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Kobrich, so as to use color printing/ bonding/ material coating, to adhesively place the measuring element, disclosed by Kobrich, onto the surface of the hotplate, as taught by Feldman, because these methods of deposition are very well known in the art to deposit a material onto a surface of interest that is subject to a high temperature, when there is a need of a good adhesion (self-adhesive) of the coating to the surface of interest during heating.

With respect to claim 10: With respect to the particular height that the measuring element projects over the top surface, i.e., 0.05 and 0.15 mm above a top surface of cooktop, the particular height (size), absent any criticality, is only considered to be the "optimum" size of the device disclosed by Feldman that a person having ordinary skill in the art at the time the invention was made would have found obvious to provide using routine experimentation based, among other things, on the intended use of the device, the particular temperature range and aesthetic requirements. *See In re Boesch*, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the measuring element of the device, disclosed by Kobrich, so as to make it projecting 0.05 to

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0.15 mm over the top surface of the hotplate, i.e., high enough so as to make the cooking zone distinct from other zones, and low enough so as to prevent a cooking pot from falling over, if the cooking vessel is not properly positioned on the cooking zone.

11. Claim 25 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Kobrich.

Kobrich discloses the device as stated above in paragraph 8.

Kobrich does not explicitly teach the limitations of claim 25.

With respect to claim 25: With respect to the particular height that the measuring element projects over the top surface, i.e., 0.05 and 0.15 mm above a top surface of cooktop, the particular height (size), absent any criticality, is only considered to be the "optimum" size of the device disclosed by Feldman that a person having ordinary skill in the art at the time the invention was made would have found obvious to provide using routine experimentation based, among other things, on the intended use of the device, the particular temperature range and aesthetic requirements. See In re Boesch, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the measuring element of the device, disclosed by Kobrich, so as to make it projecting 0.05 to 0.15 mm over the top surface of the hotplate, i.e., high enough so as to make the cooking zone distinct from other zones, and low enough so as to prevent a cooking pot from falling over, if the cooking vessel is not properly positioned on the cooking zone.



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12. Claims 11-13, 26, 30-31, 34, 37-42, 45-49, 55-56, 58-60 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Kobrich in view of Gross.

Kobrich discloses the device as stated above in paragraph 8.

Kobrich does not teach three (several) measuring elements, and that the elements can be positioned in a triangular arrangement in the vicinity of the heating zone. Kobrich does not teach the measuring element positioned eccentrically.

Gross teaches that having several measuring (sensing) elements (leaves/ loops) under a cooking vessel will allow position them in a symmetrical triangular arrangement, as shown in Fig. 2, in the vicinity of the heating / cooking zone. Thus, inherently, each of the measuring elements is positioned eccentrically relative to a center of the heating zone. In this case, inherently, the sensing elements can obtain a very large coverage of the sensing region of the cooking vessel (pot).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Kobrich, so as to have three measuring elements positioned in a triangular (eccentric) arrangement, as taught by Gross, so as to have three (several) measuring elements symmetrically distributed over the surface of interest of the hotplate, so as to enable the user to obtain measurements from different point of the hotplate/ pot, in order to achieve more accurate results by having a larger coverage.

With respect to claims 58-60: the method steps will be met during the normal operation of the device stated above.

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13. Claims 32-33, 35-36, 43-44 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Kobrich and Gross as applied to claims 11-13, 26, 30-31, 34, 37-42, 45-49, 55-56, 58-60 above, and further in view of Feldman.

Kobrich and Gross disclose the device as stated above in paragraph 12.

They do not explicitly state that the measuring element 9 is a material coating applied in a self-adhesive manner, printed color coating, metal foil, that the material is bonded.

Feldman discloses in Fig. 2 a device in the filed of applicant's endeavor comprising a flat temperature measuring element 118, 120 being in contact with a surface of a cooking vessel and being a silver/ color thin film/ metal foil/ metal oxide film (material coating). The measuring element can be printed on (applied in a self-adhesive manner/ bonded). The measuring element is in a contact with the cooking vessel. It is inherent, the measuring element of metal or metal oxide has a good heat conduction (low heat capacity).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Kobrich and Gross, so as to use color printing/ bonding/ material coating, to adhesively place the measuring element, disclosed by Kobrich, onto the surface of the hotplate, as taught by Feldman, because these methods of deposition are very well known in the art to deposit a material onto a surface of interest that is subject to a high temperature, when there is a need of a good adhesion (self-adhesive) of the coating to the surface of interest during heating.

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*Response to Arguments*

14. Applicant's arguments with respect to claims 2-8, 10-15, 18, 20-60 have been considered but are moot in view of the new ground(s) of rejection necessitated by the present amendment.

With respect to Feldman: Applicant states that Feldman has no division (separation) between the measuring element and the device. This argument is now moot in view of the new grounds of rejection necessitated by the present amendment.

With respect to Gross: Applicant states that Gross senses the presence of the cooking vessel (not temperature sensor). This argument is not persuasive because the Examiner in the rejection on the merits, only uses Gross for its teaching that there can be several sensing (measuring) elements positioned eccentrically to the center, in order to obtain a larger coverage.

*Conclusion*

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

17. Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (703) 306-5473 Monday through Friday, 7:30 to 4:00 ET.

Any inquiry of general nature should be directed to the group Receptionist whose telephone number is (703) 308-0956.

GKV

06 October 2003

*Gail Verbitsky*



*Patent Examiner, TC 2800*